

Preterm Premature Rupture of Membranes: (PPROM)

Definition: Spontaneous rupture of the fetal membranes before the onset of labor at gestational age beyond 37 weeks

-Membranes: the amnion & the chorion which surround a developing fetus.

Function: 1-Protection of the fetus 2-Preservation of the Liquor (amniotic fluid)

- لازم نعرف كويس الـ Gestational Age والـ Well-being of the fetus لأن على أساسهم بنحدد امتى يكون الـ Rupture ده

Premature Rupture ، لأن خلال الولادة لازم يحصل Rupture حتى لو كان artificial اللي بنسميه Pre-labor/Intrapartum ROM

- ممكن الـ Rupture يحصل والـ Cervix لسه مقفول لوفيه زيادة الضغط زي الـ Polyhydramnios أو نتيجة Trauma/Infection

- لو حصل قبل ٢٦ أسبوع بنعتبره Abortion وقد يعتبر Extreme premature ROM ، لكن اللي يهمنى هما الأسابيع ٢٦-٣٧

****Latency Period:** the time lag between the ROM & the onset of labor, ↓ with the ↑ of gestational age

Incidence: -Occurs In 3% to 19% of pregnancies -Account for 30% of preterm births

-If occurs before 26 wks, 50% of cases will labor within 24 hrs

Significance: -Short term neonatal morbidity: Resp Distress Syndrome, Jaundice, intracranial Hemorrhage

-Long term morbidity: Cerebral Palsy, Mental Retardation

Etiology & Risk Factors:

1-Intrauterine Infection 2-History of PPRM 3-Trauma 4-Amniocentesis 5-Polyhydramnios

Prevention:

1-Identification of the high risk group (e.g. twins, previous PPRM, UTI) 2-Treatment of the infection

Evaluation:

1-Dating & exact timing of ROM 2-Signs of Chorioamnionitis 3-Digital examination should be avoided

4-Gush of fluid (watery, colorless, odorless) 5-Sterile speculum examination 6-Lab studies

7-U/S evaluation 8-Indigo Carmine Injection 9-Fetal Monitoring

Types (according to site of tear):

1-Lower half→ Rupture of forewater 2-Upper half→ Rupture of hindwater

****Hindwater rupture has better prognosis and spontaneous sealing occurs more often**

Management:

A) Gestational age less than 28 weeks: There is little chance of fetal survival, usually inevitable abortion

B) Gestational age between 28-34 weeks:

1-Exclude infection: (Signs: Tachycardia, fever – Investigations: CBC, ↑ESR, C-reactive protein)

2-Exclude Fetal distress: (Fetal kicking, U/S, Biophysical profile)

2-Conservative management till 35th week:

-Rest in bed -Prophylactic antibiotics (Erythromycin - Cephalosporin)

-Corticosteroid therapy: to enhance lung maturity, Dose→ 24 mg divided in 2-3 doses in 24 hrs

-Observation of temp, malaise, abdominal pain, ... -Frequent evaluation every 48 hours

****Terminate pregnancy with any abnormality in mother or baby (Vaginal or CS as suitable for the case)**

****In immunocompromised patients (e.g. DM) → Shorten conservative TTT as possible**

****In Extreme premature: -Amnioinfusion: infusion of fluid intrauterine to compensate the loss of liquor**

-Amniopatch: sealing the tear with the use of platelets and cryoprecipitate

C) Gestational age over 36 weeks: wait for 24 hrs, 90% of cases will pass into spontaneous labor

****If patient is using a cerclage→ It should be removed to avoid infection**